

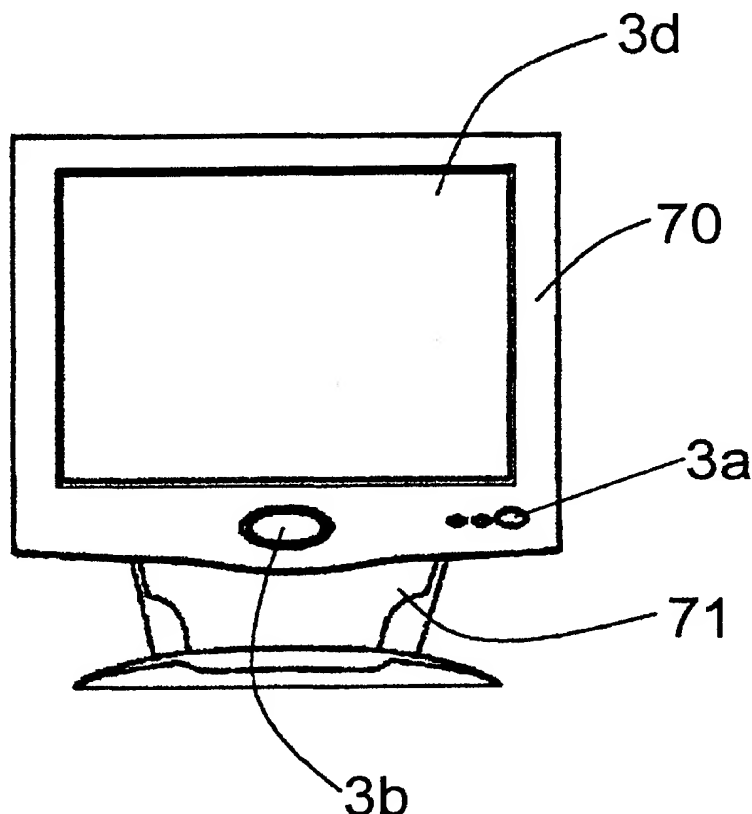


## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/KR00/00374 <b>(22) International Filing Date:</b> 20 April 2000 (20.04.00) <b>(30) Priority Data:</b> 1999/6559      20 April 1999 (20.04.99)      KR <b>(71)(72) Applicant and Inventor:</b> HAN, Dae, Ick [KR/KR]; 402 Young-Hwa Park Villa, 21-1, Koo-Wee 2Dong, Kwang-Jin Goo, Seoul 143-201 (KR).		<b>(81) Designated States:</b> AE, AT, AU, BR, CA, CH, CN, CZ, DE, DK, ES, FI, HR, HU, ID, IL, JP, KP, MX, NO, NZ, PL, RU, SG, TR, US, VN, ZA, Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> <i>In English translation (filed in Korean).</i>

**(54) Title:** FINGERPRINT RECOGNITION SECURITY COMPUTER MONITOR**(57) Abstract**

This invention relates to fingerprint recognition system equipped monitor. Finger print recognition is one of most useful technologies in the biometrics recognition field. And there are many types of fingerprint recognition sensors and it is common knowledge with flow program developed recently. And this invention is various composing on the inner structure to the outer surface of monitor case. And exposing fingerprint recognition window of fingerprint recognition sensor on the surface of computer monitor or display device. That can recognize individuals and operate by touching user's fingerprints and using its taken fingerprint information. Accordingly, this new invention offers the common knowledge computer monitor or display devices equipped with these common knowledge fingerprint recognition system using its flow program. These monitors and display devices are useful for information Security of computer and network and security of various kinds of electronic commerce.



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# FINGERPRINT RECOGNITION SECURITY COMPUTER MONITOR

## TECHNICAL FIELD

5                                This invention relates to computer monitor, in particular, to fingerprint recognition system equipped monitor, that is composed of computer monitor in common or display device receiving display signals, and fingerprint recognition system in various manners.

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## BACKGROUND ART

                              This invention relates to fingerprint recognition system equipped monitor composed of monitor or display device  
15        and fingerprint recognition system that can recognize individuals by user's fingerprints, one of most useful technologies in the biometric field. And there are many types of fingerprint recognition sensors and it's common knowledge flow program developed recently(ex : Maker : Nitgen / Model : FDP01)– optical recognition,  
20        semiconductor, surface dielectric methods, laser line scan methods and etc.. Among them optical recognition types have better recognition ability and endurance with less fail rates. Accordingly, This new invention offers the fingerprint recognition devices equipped of  
25        computer monitor or display device and these common knowledge fingerprint recognition module, sensor and with using its flow program

## DISCLOSURE OF INVENTION

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                              This invention offers computers monitor and display devices to recognize the fingerprint of users. These devices are made by equipping fingerprint recognition device in common knowledge to the case of computer monitor or display  
35        devices on the inner structure to the outer surface, exposing

## 2

And driving its program, users input their fingerprint information by touching simply their fingers, instead of usual password, on the windows of the fingerprint recognition sensors on the surface of these monitors or display devices. And this taken  
5 fingerprint information inputted in fingerprint recognition devices can be transferred to the computers and these transferred inform of computer, through port, to be used for recognizing users and the computer admit or disapprove to use the access to the inner information of computers or networks by using its  
10 fingerprint informs and various fingerprint flow programs of common knowledge. These monitors and display devices are useful for information security of computer and network and security of various kinds of electronic commerce.

## 15 BRIEF DESCRIPTION OF DRAWINGS

For the clear understanding of this invention and the advantages of it, drawings are attached with descriptions.

20 FIG. 1, illustration is an exemplification how the computer monitor composed of the case (70), the stand (71) and the power button (3a) is equipped with the fingerprint recognition system (3b) from the inside to the outer surface.

25 FIG. 2 illustrates the side view of this invention's computer monitor with how to use touching on window of sensor of the fingerprint recognition. It composed of the case parts (70), the stand (71) and the power button (3a) in which the fingerprint recognition system (3b) is equipped front of the monitor at the  
30 bottom from the inside to the outer surface below the display part (3d) of the monitor. And the fingerprint of users can be touched on the recognition systems (3b). The port (3c) of the fingerprint recognition system is connecting to the computers and through this port, fingerprint information access use  
35 recognition program.

## 3

## BEST MODE OF CARRING OUT THE INVENTION

For the clear understanding of this invention and the advantages of it, drawings are attached with descriptions

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FIG. 2 illustrates effectively of this invention's computer monitor. It composed of the case (70), the stand (71) and the power button (3a) in which the fingerprint recognition system (3b) is equipped at the bottom from the inside to the outer surface below the display part (3d) of the monitor and the fingerprint of users can be touched on the recognition systems (3b). The port (3c) of the fingerprint recognition system is connecting to the computers, accessing fingerprint recognition program with the fingerprint information inputted.

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## WHAT IS CLAIMED IS

A computer monitor with the fingerprint recognition system, composed of computer monitor in general use and fingerprint recognition system (3b) which is fixed on the surface of the monitor case (70) that the window of fingerprint system is exposed to the outer surface for user's ease access.

A display device with the fingerprint recognition system, composed of display device in general use and fingerprint recognition system (3b) which is fixed on the surface of the display device case that the window of fingerprint system is exposed to the outer surface for user's ease access.

## ABSTRACT OF THE DISCLOSURE

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This invention relates to fingerprint recognition system equipped monitor. Finger print recognition is one of most useful technologies in the biometrics recognition field. And there are many types of fingerprint recognition sensors and it is common knowledge

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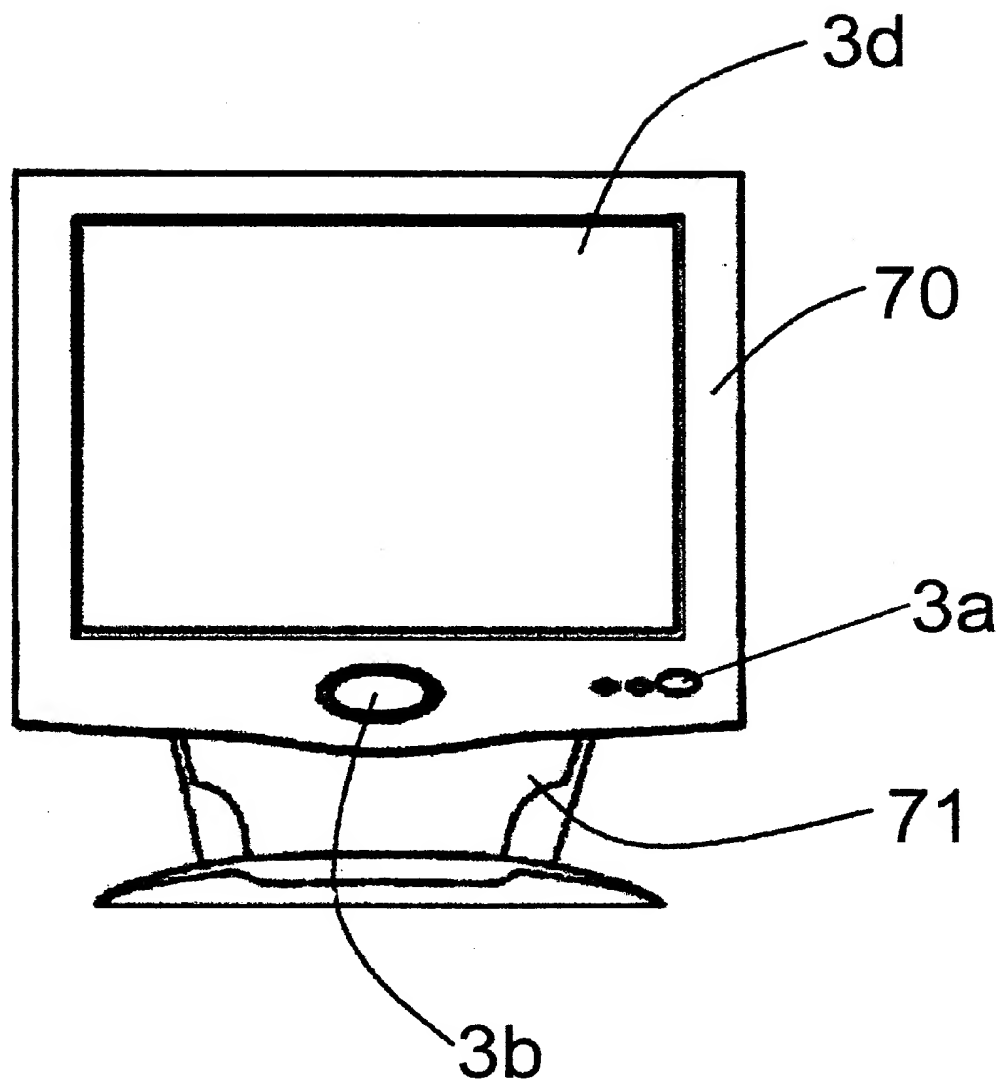


FIG-1

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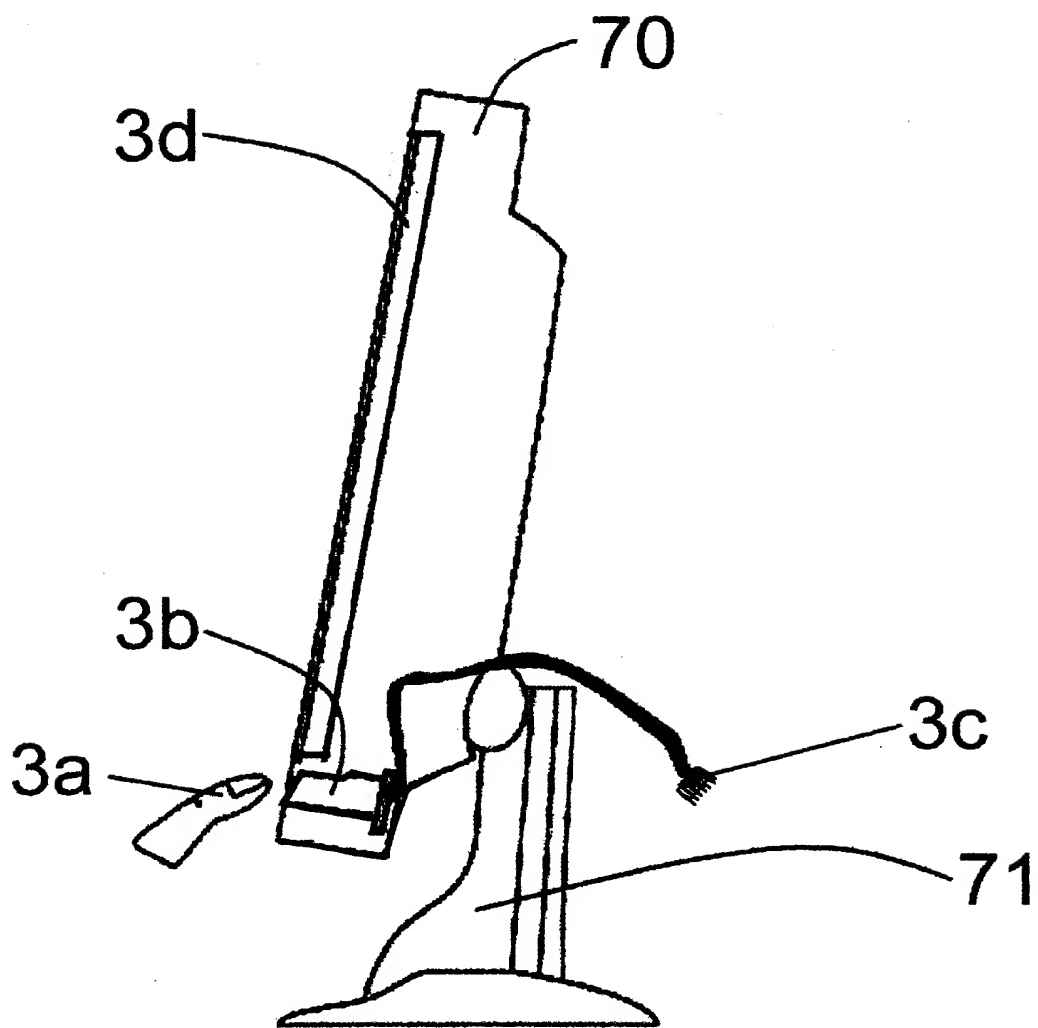


FIG-2

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR00/00374

**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 G06F 3/14, G06K 9/00**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC7 G06F 3/14 G06F 17/60 G06F 1/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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WPI, PAJ, IEEE/IEE Electronic Library (Since 1988) "FINGERPRINT, MONITER, DISPLAY, INTERNET, NETWORK"

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0593386 A2 (IBM CORPORATION) 20 APRIL 1994 (20. 04. 1994.) THE WHOLE DOCUMENT	1- 4
Y	KR 98-042976 A (YUN, TAE SIK) 17 AUGUST 1998 (17. 08. 1998.) THE WHOLE DOCUMENT	1- 4
X	JP 9-330140 A (NEC ENG LTD) 22 DECEMBER 1997 (22. 12. 1997.) THE WHOLE DOCUMENT	1, 2
X	KR 89-10731 A (LG CO., LTD.) 10 AUGUST 1989 (10. 8. 1989) THE WHOLE DOCUMENT	1, 2
PX	KR 2000-0184982 Y1 (SAM SUNG ELECTRONICS CO., LTD.) 28 MARCH 2000 (28. 03. 2000) THE WHOLE DOCUMENT	1- 4
PX	KR 99-62951 A (NEC CORPORATION) 26 JULY 1999 (26. 07. 1999.) THE WHOLE DOCUMENT	1, 2

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0593386 A2	20. 04. 1994.	JP 07-234837 A US 5420936 A	05. 09. 1995. 30. 05. 1995